

WHAT IS CLAIMED IS:

1. An absorbent article comprising:
 - a first substrate;
 - a second substrate in generally superposed relationship with the first substrate;
- 5 a first absorbent structure disposed between the first and second substrates, the first absorbent structure comprising at least two absorbent segments arranged in generally adjacent, edge-facing-edge relationship with each other and having a boundary region between said adjacent absorbent segments; and
- 10 a second absorbent structure disposed between the first and second substrates in generally superposed relationship with the first absorbent structure, the second absorbent structure comprising at least two absorbent segments arranged in generally adjacent, edge-facing-edge relationship with each other and having a boundary region between said adjacent absorbent segments, at least one absorbent segment of the second absorbent structure being in superposed relationship with at least a portion of at least two adjacent absorbent segments of the first absorbent structure and the boundary region between said at least two adjacent absorbent segments of the first absorbent structure.
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2. An absorbent article as set forth in claim 1 wherein at least one absorbent segment of the first absorbent structure is attached to the first substrate.
3. An absorbent article as set forth in claim 2 wherein each of the absorbent segments of the first absorbent structure is attached to the first substrate.

4. An absorbent article as set forth in claim 2 wherein at least one absorbent segment of the second absorbent structure is attached to the second substrate.

5. An absorbent article as set forth in claim 1 wherein the absorbent segments of the first absorbent structure are free from attachment to the absorbent segments of the second absorbent structure.

6. An absorbent article as set forth in claim 1 wherein at least one of the first and second substrates is stretchable, at least one absorbent segment of the second absorbent structure remaining in superposed relationship with
5 at least two adjacent absorbent segments and the boundary region therebetween of the first absorbent structure upon stretching of at least one of the outer cover and the liner.

7. An absorbent article as set forth in claim 6 wherein adjacent absorbent segments of at least one of the first absorbent structure and the second absorbent structure are separable from each other at the boundary region therebetween
5 upon stretching of said at least one of the first and second substrates.

8. An absorbent article as set forth in claim 6 wherein said at least one of the first and second substrates is elastic.

9. An absorbent article as set forth in claim 1 wherein the absorbent segments of the first absorbent structure are discrete absorbent segments.

10. An absorbent article as set forth in claim 9 wherein the absorbent segments of the second absorbent structure are discrete absorbent segments.

11. An absorbent article as set forth in claim 9 wherein adjacent absorbent segments of the first absorbent structure are spaced from each other at the boundary region therebetween a distance of less than about 5 mm.

12. An absorbent article as set forth in claim 9 wherein adjacent absorbent segments of the first absorbent structure are in abutting relationship with each other at the boundary region therebetween.

13. An absorbent article as set forth in claim 2 wherein at least one absorbent segment of the first absorbent structure has a length and a width and is attached to the first substrate at an attachment region, the attachment 5 region having a length and a width wherein at least one of the length of the attachment region is substantially smaller than the length of the absorbent segment and the width of the attachment region is substantially smaller than the width of the absorbent segment.

14. An absorbent article as set forth in claim 1 wherein adjacent absorbent segments of the first absorbent structure are interconnected at the boundary region therebetween.

15. An absorbent article as set forth in claim 14 wherein the first absorbent structure has a density at each of the adjacent absorbent segments and a density at the boundary region between adjacent absorbent segments which is 5 substantially less than the density of the first absorbent structure at each of the adjacent absorbent segments.

16. An absorbent article as set forth in claim 14 wherein the first absorbent structure has a basis weight at each of the adjacent absorbent segments and a basis weight at

the boundary region between adjacent absorbent segments which
5 is substantially less than the basis weight of the first
absorbent structure at each of the adjacent absorbent
segments.

17. An absorbent article as set forth in claim 1
wherein at least one absorbent segment of the first absorbent
structure has one of a different density, a different
thickness, a different basis weight, a different length and a
5 different width relative to at least one other absorbent
segment of the first absorbent structure.

18. An absorbent article as set forth in claim 1
wherein at least one absorbent segment of the first absorbent
structure has one of a different density, a different
thickness, a different basis weight, a different length and a
5 different width relative to at least one absorbent segment of
the second absorbent structure.

19. An absorbent article as set forth in claim 1
wherein the absorbent segments of the first absorbent
structure each comprise a mixture of hydrophilic fibers and
superabsorbent material.

20. An absorbent article as set forth in claim 19
wherein the absorbent segments of the second absorbent
structure each comprise a mixture of hydrophilic fibers and
superabsorbent material.

21. An absorbent article as set forth in claim 19
wherein at least one absorbent segment of the first absorbent
structure has a superabsorbent material concentration which
is different from a superabsorbent material concentration of
5 at least one other absorbent segment of the first absorbent
structure.

22. An absorbent article as set forth in claim 1 wherein the first and second absorbent structure are in generally overlapping relationship with each other whereby at least one absorbent segment of the second absorbent structure 5 is in overlapping relationship with at least a portion of at least two adjacent absorbent segments of the first absorbent structure and the boundary region between said at least two adjacent absorbent segments of the first absorbent structure.

23. An absorbent article as set forth in claim 1 wherein at least one absorbent segment of the first absorbent structure is in superposed relationship with at least a portion of at least two adjacent absorbent segments of the 5 second absorbent structure and the boundary region between said at least two adjacent absorbent segments of the second absorbent structure.

24. An absorbent article as set forth in claim 1 wherein the first absorbent structure comprises at least four absorbent segments arranged in adjacent, edge-facing-edge relationship with each other and having a boundary region 5 between adjacent absorbent segments, at least one absorbent segment of the second absorbent structure being in overlapping relationship with at least a portion of at least four adjacent absorbent segments of the first absorbent structure and the boundary region between said at least four 10 adjacent absorbent segments of the first absorbent structure.

25. An absorbent article as set forth in claim 1 comprising an outer cover defined by the first substrate and a liquid permeable liner defined by the second substrate, the liquid permeable liner being adapted for contiguous 5 relationship with the wearer of the absorbent article.

26. An absorbent article as set forth in claim 1 wherein the absorbent article comprises a pair of training pants.

27. An absorbent article as set forth in claim 1 wherein at least one absorbent segment of the first absorbent structure is oriented to extend in a direction which is different from a direction of extension of at least one other 5 absorbent segment of the first absorbent structure.

28. An absorbent article as set forth in claim 1 wherein at least one absorbent segment of at least one of the first and second absorbent structures comprises a liquid permeable enclosure and at least one absorbent component 5 disposed within the enclosure.

29. An absorbent article as set forth in claim 28 where the absorbent component comprises at least one of hydrophilic fibers and superabsorbent material.

30. An absorbent article comprising:

a first substrate;

a second substrate in generally superposed relationship with the first substrate;

5 a first absorbent structure disposed between the first and second substrates, the first absorbent structure comprising at least two adjacent absorbent segments arranged in generally edge-facing-edge relationship with each other and having a boundary region therebetween, each of said 10 absorbent segments being attached to the first substrate for movement therewith; and

a second absorbent structure disposed between the first and second substrates in generally superposed relationship with the first absorbent structure, the second absorbent

15 structure comprising at least two adjacent absorbent segments arranged in generally edge-facing-edge relationship with each other and having a boundary region therebetween, each of the absorbent segments of the second absorbent structure being attached to the second substrate for movement with the second
20 substrate, the absorbent segments of the second absorbent structure being free from attachment to the absorbent segments of the first absorbent structure to permit movement of the absorbent segments of the second absorbent structure relative to the absorbent segments of the first absorbent
25 structure upon movement of the first and second substrates.

31. An absorbent article as set forth in claim 30 wherein at least one of the first and second substrates is stretchable.

32. An absorbent article as set forth in claim 31 wherein said at least one of the first and second substrates is elastic.

33. An absorbent article as set forth in claim 30 wherein the absorbent segments of the first absorbent structure are discrete absorbent segments.

34. An absorbent article as set forth in claim 33 wherein the absorbent segments of the second absorbent structure are discrete absorbent segments.

35. An absorbent article as set forth in claim 33 wherein adjacent absorbent segments of the first absorbent structure are spaced from each other at the boundary region therebetween.

36. An absorbent article as set forth in claim 33 wherein adjacent absorbent segments of the first absorbent

structure are in abutting relationship with each other at the boundary region therebetween.

37. An absorbent article as set forth in claim 35 wherein the absorbent segments of the second absorbent structure are discrete absorbent segments, said absorbent segments being spaced from each other at the boundary region
5 therebetween.

38. An absorbent article as set forth in claim 31 wherein the first substrate is stretchable, adjacent absorbent segments of the first absorbent structure being separable from each other upon stretching of the first
5 substrate.

39. An absorbent article as set forth in claim 38 wherein the second substrate is also stretchable, adjacent absorbent segments of the second absorbent structure being separable from each other upon stretching of the second
5 substrate.

40. An absorbent article as set forth in claim 31 wherein the second substrate is stretchable, adjacent absorbent segments of the second absorbent structure being separable from each other upon stretching of the second
5 substrate.

41. An absorbent article as set forth in claim 30 wherein adjacent absorbent segments of the first absorbent structure are interconnected at the boundary region between said adjacent absorbent segments.

42. An absorbent article as set forth in claim 41 wherein the first absorbent structure has a density at each of the adjacent absorbent segments and a density at the boundary region between adjacent absorbent segments which is

5 substantially less than the density of the first absorbent structure at each of the adjacent absorbent segments.

43. An absorbent article as set forth in claim 41 wherein the first absorbent structure has a basis weight at each of the adjacent absorbent segments and a basis weight at the boundary region between adjacent absorbent segments which 5 is substantially less than the basis weight of the first absorbent structure at each of the adjacent absorbent segments.

44. An absorbent article as set forth in claim 30 wherein at least one absorbent segment of the first absorbent structure has one of a different density, a different thickness, a different basis weight, a different length and a 5 different width relative to at least one other absorbent segment of the first absorbent structure.

45. An absorbent article as set forth in claim 30 wherein at least one absorbent segment of the first absorbent structure has one of a different density, a different thickness, a different basis weight, a different length and a 5 different width relative to at least one absorbent segment of the second absorbent structure.

46. An absorbent article as set forth in claim 30 wherein the absorbent segments of the first absorbent structure each comprise a mixture of hydrophilic fibers and superabsorbent material.

47. An absorbent article as set forth in claim 46 wherein the absorbent segments of the second absorbent structure each comprise a mixture of hydrophilic fibers and superabsorbent material.

48. An absorbent article as set forth in claim 46 wherein at least one absorbent segment of the first absorbent structure has a superabsorbent material concentration which is different from a superabsorbent material concentration of 5 at least one other absorbent segment of the first absorbent structure.

49. An absorbent article as set forth in claim 47 wherein at least one absorbent segment of the first absorbent structure has a superabsorbent material concentration which is different from a superabsorbent material concentration of 5 at least one absorbent segment of the second absorbent structure.

50. An absorbent article as set forth in claim 30 wherein the absorbent article comprises an outer cover defined by the first substrate and a liquid permeable liner defined by the second substrate and adapted for contiguous 5 relationship with a wearer of the absorbent article.

51. An absorbent article as set forth in claim 30 wherein the absorbent article comprises a pair of training pants.

52. An absorbent article as set forth in claim 30 wherein at least one absorbent segment of at least one of the first and second absorbent structures comprises a liquid permeable enclosure and at least one absorbent component 5 disposed within the enclosure.

53. An absorbent article as set forth in claim 52 where the absorbent component comprises at least one of hydrophilic fibers and superabsorbent material.

54. An absorbent article comprising:

a substrate; and

an absorbent structure comprising at least two adjacent absorbent segments arranged in generally edge-facing-edge

5 relationship with each other and having a boundary region therebetween, the absorbent segments being attached to the substrate for movement with said substrate, said absorbent segments and boundary region being constructed to permit movement of the absorbent segments relative to each other at 10 the boundary region therebetween upon movement of the substrate.

55. An absorbent article as set forth in claim 54 wherein the substrate is stretchable, the absorbent segments being separable from each other at the boundary region therebetween upon stretching of the substrate.

56. An absorbent article as set forth in claim 54 wherein the absorbent segments of the absorbent structure are interconnected at the boundary region therebetween.

57. An absorbent article as set forth in claim 55 wherein the absorbent structure has a density at each absorbent segment and a density at the boundary region which is substantially less than the density of the absorbent 5 structure at each absorbent segment.

58. An absorbent article as set forth in claim 55 wherein the absorbent structure has a basis weight at each absorbent segment and a basis weight at the boundary region which is substantially less than the basis weight of the 5 absorbent structure at each absorbent segment.

59. An absorbent article as set forth in claim 55 wherein the absorbent segments are discrete absorbent segments.

60. An absorbent article as set forth in claim 59 wherein the absorbent segments are spaced from each other at the boundary region therebetween.

61. An absorbent article as set forth in claim 59 wherein the absorbent segments are in abutting relationship at the boundary region therebetween.

62. An absorbent article as set forth in claim 54 wherein the absorbent article comprises an outer cover and a liquid permeable liner in superposed relationship with the outer cover, the absorbent structure being disposed between 5 the liner and the outer cover, one of the liner and the outer cover defining the substrate to which the absorbent segments of the absorbent structure are attached.

63. An absorbent article as set forth in claim 54 wherein at least one absorbent segment of the absorbent structure has one of a different density, a different thickness, a different basis weight, a different length and a 5 different width relative to at least one other absorbent segment of the absorbent structure.

64. An absorbent article as set forth in claim 54 wherein the absorbent segments of the absorbent structure each comprise a mixture of hydrophilic fibers and superabsorbent material.

65. An absorbent article as set forth in claim 64 wherein at least one absorbent segment of the absorbent structure has a superabsorbent material concentration which is different from a superabsorbent material concentration of 5 at least one other absorbent segment of the absorbent structure.